

ABSTRACT

The present invention is an electronic isolator that provides low input to output insertion loss, high output to input insertion loss, and substantial asymmetric isolation between a source circuit and a load circuit. The invention actively reduces noise and reflected power appearing on the isolator output. In numerous embodiments, the invention operates in circuit applications from dc through millimeter wave. Multistage electronic isolator embodiments provide increased isolation and greater noise reduction. In other embodiments, the electronic isolator also removes noise appearing on its input. In another embodiment, the invention is configured for high power applications. This embodiment includes circuitry for redirecting power away from the load into resistors or other dissipative elements. In another embodiment, the electronic isolator is configured to remove signal distortion produced by one or more power amplifiers in the system.